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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/086,305	
	Filing Date	March 1, 2002	
	First Named Inventor	Eugene C. Ngai	
	Group Art Unit	2821	
	Examiner Name	Not Yet Assigned	
Total Number of Pages in This Submission	8	Attorney Docket Number	MIT-105PUS

ENCLOSURES (check all that apply)				
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return-receipted postcard; Request for Corrected Filing Receipt; Copies of Express Mail Receipt, Utility Transmittal (PTO/SB/05) and Patent Application Title Page		
<table border="1"><tr><td>Remarks</td></tr><tr><td>In the event a petition for extension of time is required by this paper and not otherwise provided, such petition is hereby made and authorization is provided herewith to charge deposit account No. 50-0845 for the cost of such extension.</td></tr></table>			Remarks	In the event a petition for extension of time is required by this paper and not otherwise provided, such petition is hereby made and authorization is provided herewith to charge deposit account No. 50-0845 for the cost of such extension.
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Kermit Robinson Reg. No. 48,734 Daly, Crowley & Mofford, LLP
Signature	<i>Kermit Robinson</i>
Date	April 17, 2002

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: April 17, 2002	
Typed or printed name	Kermit Robinson
Signature	<i>Kermit Robinson</i>
Date	April 17, 2002

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Eugene C. Ngai, et al.

Appl. No. : 10/086,305

Filed : March 1, 2002

Entitled : TURNTABLE MULTI-BAND ANTENNA
ARRAY

Docket : MIT-105PUS

Group Art Unit: 2821

Examiner: Not Yet Assigned

Certificate of Mailing (37 C.F.R. 1.8(a))

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April 17, 2002
Date of Signature
and Mail Deposit

By: Kermit Robinson
Kermit Robinson
Reg. No. 48,734

REQUEST FOR CORRECTED FILING RECEIPT

Assistant Commissioner for Patents
Office of Initial Patent Examination
Customer Service Center
Washington, DC 20231

Sir:

In reviewing the filing receipt (copy enclosed) for the above-identified patent application, the following error was noted:

The filing date is incorrectly shown as 03/02/2002. The correct filing date is 03/01/2002. Enclosed herewith is a true copy of the Express Mail receipt showing the date as 3/1/02. Also

enclosed is a copy of the transmittal form (PTO/SB/05) and a copy of the patent application title page, both showing the Express Mail number in agreement with the Express Mail receipt.

Kindly correct this error of the Patent and Trademark Office and issue a corrected Filing Receipt.

Respectfully submitted,

DALY, CROWLEY & MOFFORD, LLP

April 17, 2002
Dated

By: Kermit Robinson
Kermit Robinson
Reg. No. 48,734
Attorney for Applicant(s)
275 Turnpike Street, Suite 101
Canton, MA 02021-2310
Telephone: (781) 401-9988 x24
Facsimile: (781) 401-9966



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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
10/086,305	03/02/2002 03/01/2002	2821	397	MIT-105PUS	5	23	2

022494
DALY, CROWLEY & MOFFORD, LLP
SUITE 101
275 TURNPIKE STREET
CANTON, MA 02021-2310



CONFIRMATION NO. 8565

FILING RECEIPT



OC00000007791407

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Date Mailed: 04/04/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Eugene C. Ngai, Northboro, MA;
Paul A. Theophelakes, Tewksbury, MA;
Richard J. Cotillo, Boxborough, MA;
Dennis J. Blejer, Sudbury, MA;

Domestic Priority data as claimed by applicant

Foreign Applications

If Required, Foreign Filing License Granted 04/03/2002

Projected Publication Date: To Be Determined - pending completion of Corrected Papers

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

Tunable multi-band antenna array

Preliminary Class

Docketed

**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

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NOT GRANTED

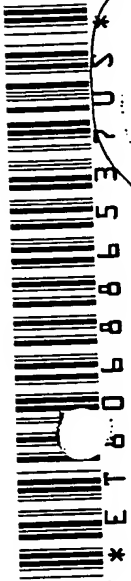
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**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	MIT-105PUS
First Inventor	Eugene C. Ngai
Title	Tunable Multi-Band Antenna Array
Express Mail Label No.	ET806886537US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification [Total Pages **17**]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets **5**]
5. Oath or Declaration [Total Pages **4**]
 - a. ☒ Newly executed (original or copy)
Copy from a prior application (37 CFR 1.63 (d))
 - b. ☐ (for continuation/divisional with Box 18 completed)
 - i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i. ☐ CD-ROM or CD-R (2 copies); or
 - ii. ☐ paper
 - c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement of Power of Attorney (when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Patent Application Title Page

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: _____

Prior application information:

Examiner: _____

Group Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label



or ☐ Correspondence address below

Name	Kermit Robinson				
Address	Daly, Crowley & Mofford, LLP 275 Turnpike Street, Suite 101				
City	Canton	State	MA	Zip Code	02021-2310
Country	US	Telephone	781.401.9988 ext. 24	Fax	781-401-9966

Name (Print/Type)	Kermit Robinson	Registration No. (Attorney/Agent)	48,734
Signature		Date	March 1, 2002

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UNITED STATES PATENT APPLICATION

of

Eugene C. Ngai
Paul A. Theophelakes
Richard J. Cotillo
Dennis J. Blejer

for

TUNABLE MULTI-BAND ANTENNA ARRAY

DALY, CROWLEY & MOFFORD, LLP
275 Turnpike Street, Suite 101
Canton, MA 02021-2310
Telephone (781) 401-9988
Facsimile (781) 401-9966

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Eugene Ngai, et al.

Appl. No. : 10/086,305

Filed : March 1, 2002

Entitled : TUNABLE MULTI-BAND ANTENNA
ARRAY

Docket No. : MIT-105PUS

Group Art Unit: 2821

Examiner: Not Yet Assigned

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April 17, 2002
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By: Kermit Robinson
Kermit Robinson
Reg. No. 48,734

RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS

Customer Service Center
Initial Patent Examination Division
Washington, DC 20231

Sir:

The Examiner has notified us via an Office Action dated April 4, 2002 to file substitute drawings in compliance with 37 CFR 1.84. A copy of the Notice to File Corrected Application Papers and the formal drawings are enclosed.

We hereby request that the Examiner's records regarding this submission be updated.

Respectfully submitted,

DALY, CROWLEY & MOFFORD, LLP

April 17, 2002
Dated

By: Kermit Robinson
Kermit Robinson
Reg. No. 48,734
Attorney for Applicant(s)
275 Turnpike Street, Suite 101
Canton, MA 02021-2310
Telephone: (781) 401-9988 x24
Facsimile: (781) 401-9966



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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/086,305	03/02/2002	Eugene C. Ngai	MIT-105PUS

022494
DALY, CROWLEY & MOFFORD, LLP
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CONFIRMATION NO. 8565

FORMALITIES LETTER

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NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

This application has been accorded an Application Number and Filing Date. The application, however, is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given **TWO MONTHS** from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a)

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawings submitted to the Office are not electronically reproducible. Drawing sheets must be submitted on paper which is flexible, strong, white, smooth, non-shiny, and durable (see 37 CFR 1.84(e));

A copy of this notice MUST be returned with the reply.

M. Marshall

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/086,305	
	Filing Date	March 1, 2002	
	First Named Inventor	Eugene C. Ngai	
	Group Art Unit	2821	
	Examiner Name	Not Yet Assigned	
Total Number of Pages in This Submission	9	Attorney Docket Number	MIT-105PUS

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input checked="" type="checkbox"/> Drawing(s) 5 Sheets of Formal Drawings	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
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<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	Response to Notice to File Corrected Application Papers;
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	Copy of Notice to File Corrected Application Papers
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	In the event a petition for extension of time is required by this paper and not otherwise provided, such petition is hereby made and authorization is provided herewith to charge deposit account No. 50-0845 for the cost of such extension.	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Kermit Robinson Reg. No. 48,734 Daly, Crowley & Mofford, LLP
Signature	<i>Kermit Robinson</i>
Date	April 17, 2002

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Typed or printed name	Kermit Robinson
Signature	<i>Kermit Robinson</i>
Date	April 17, 2002

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